UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/201,672	11/30/1998	LEONID SHEYNBLAT	02344.P034X	1857

23696 7590 03/31/2003

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER
ISSING, GREGORY C

ART UNIT	PAPER NUMBER
3662	19

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary	Application No.	Applicant(s)	
	09/201,672	SHEYNBLAT ET AL.	
	Examiner	Art Unit	
	Gregory C. Issing	3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *36-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *36-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Claims 36-67 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation regarding the request "not including a position solution of said mobile communication device" is new matter and is not enabled by the originally filed specification. The specification at pages 45-46, as well as Figures 11 and 12, describe the client device providing information to indicate its location. Moreover, the specification describes alternative data which "indirectly provide information about its location." Thus, the information provided as disclosed by the original specification still discloses information about a position solution, but it may not be as precise. There is nothing in the specification that limits the scope of "a position solution." Additionally, in the response on page 9, the applicants state "device indirectly provides information about its location to the web serve." Thus, the added claim language fails to find proper support in the application as originally filed and is required to be cancelled.

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 36, 37, 41-49, 54, 55, and 62-67 are rejected under 35 U.S.C. 102(a) as being anticipated by Tsukinokisawa.

Tsukinokisawa discloses the claimed method for providing information associated with a location of a mobile device, see Fig. 1, including a mobile device 10, internet 30, base stations 20 and service system 35. A mobile device requests information from world wide web and transmits uncorrected position information via a web browser. Upon receiving the request, the service system utilizes the uncorrected position data to retrieve correction data, correct the position data and transmit the corrected position back to the mobile device. Additionally, the service system can utilize the corrected position to retrieve map data which may also be sent to the mobile device. Additionally, note, that the embodiment of claim 54, which is directed to the mobile device merely comprise transmitting a request for information and receiving information associated with its position, the statements in the claim regarding the causing of the location server to determine position in response to the web server are not limitations and are uncontrolled by the method of the mobile device. Likewise with respect to the web server receiving information from the location server.

The applicant argues that the prior art fails to teach a location server; the mobile device determines his own position. This is not convincing since the service system can either provide the correction data to the mobile device or provide the corrected position data to the mobile device. Since it is capable of providing the corrected position, it is deemed to provide the function of a location server. Additionally, the service system provides the map/other information function in response to the corrected position information; thus, location determination is performed remote from the mobile device.

The applicant's argument that the prior art shows the mobile device initiating the request and therefore distinguishes from the claimed subject matter is not persuasive. Each of the claims sets forth a limitation for receiving a request from said mobile communication. Thus, the applicant fails to argue the claim limitations. Additionally, as the claims encompass the arrangement wherein the web server and the location server are "in one computer system", the prior art further meets the scope of the claims since the user management server 37 and the coordinate error data service server 38 are separate and within the service system 35.

5. Claims 36, 37, 41-49, 54, 55 and 62-67 are rejected under 35 U.S.C. 102(a) as being anticipated by Sommelet et al.

Sommelet et al disclose a method and apparatus wherein a combined GPS receiver/cellular phone send information to an internet server which interprets the data, ie. calculates position, and provides a map response; the advantage of position calculation and map retrieval remote from the mobile device is a reduction in cost and size of the mobile device as well as an increase in accuracy. Additionally, as the claims encompass the arrangement wherein the web server and the location server are "in one computer system", the prior art further meets the scope of the claims. Additionally, internet 4, computer 6 and GPS 7 make up a "location server" which provides the differential correction data. Additionally, note, that the embodiment of claim 54, which is directed to the mobile device merely comprise transmitting a request for information and receiving information associated with its position, the statements in the claim regarding the causing of the location server to determine position in response to the web server are not limitations and are uncontrolled by the method of the mobile device. Likewise with respect to the web server receiving information from the location server.

6. Claims 36, 37, 41-49, 54, 55 and 62-67 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Giniger et al.

Giniger et al disclose a method and apparatus for providing information associated with a location of a mobile communication device wherein the combined GPS/cellular phone sends position signals to a central site server which is capable of generating the present position information from the position signals as well as accessing other information server sites for providing location-sensitive information or application server sites for providing applications, such as emergency rescue. The various sites are accessible via cellular or terrestrial communication links and are accessible by all users. Thus, the networking involved in bi-directionally communicating information to and from the various sites anticipates or, alternatively, makes obvious the use of the internet. Additionally, note, that the embodiment of claim 54, which is directed to the mobile device merely comprise transmitting a request for information and receiving information associated with its position, the statements in the claim regarding the causing of the location server to determine position in response to the web server are not limitations and are uncontrolled by the method of the mobile device. Likewise with respect to the web server receiving information from the location server.

Giniger et al teach/suggest the determination of position at a central site, i.e. a location server, remote from the mobile device. Additionally, as the claims encompass the arrangement wherein the web server and the location server are "in one computer system", the prior art further meets the scope of the claims since the same server may provide the dual function.

7. Claims 38-40, 50-53, 56-58 and 62-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Tsukinokisawa, Sommelet et al or Giniger et al in view of Girerd et al.

Each of Tsukinokisawa, Sommelet et al and Giniger et al teach the subject matter substantially as claimed but fails to show the mobile unit specifically sending pseudoranges (PRs) via the web in order for a server to calculate position from the PRs. Girerd et al teach the conventionality of communicating PRs to a remote server for distributed processing of position information as well as the communication of auxiliary data to aid in the recovery of satellite signals at a remote mobile unit. In view of the teachings in Tsukinokisawa, Sommelet et al and Giniger et al to use bi-directional communication between the mobile device and a service system using the internet and the suggestion by Girerd et al to communicate auxiliary receiver aiding data to a mobile device via the internet as well as communicate PRs to the server for position calculation, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify any one of Tsukinokisawa, Sommelet et al and Giniger et al by providing receiver aiding data to the mobile device via the internet to reduce the processing time required to acquire the satellite signals as well as communicate mobile device-received satellite information in the form of PRs to remotely determine the position of the mobile unit and thereby reduce the cost and size of the mobile unit.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Phelan disclose a computer system that includes separate servers for providing location information 11 as well as overlay information 12. Rosen et al disclose a computer system that includes separate servers for providing information, including resolution server 110

and resource server 120. Ladner et al disclose a mobile locator system wherein there is included a user 28 requesting information about mobile device 32, which requesting information does not include a position solution, and a control center 24 comprising a web server 52 which communicates with the user 2 and communication server 40, database 46 and GIS server 48 which provides information associated with the position of the mobile device to the user via the web server.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (703)-306-4156. The examiner can normally be reached on Mon-Thurs 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (703)-306-4171. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Gregory C. Issing
Primary Examiner
Art Unit 3662

gci
March 24, 2003